Sheet 1 of 6

Form PTO-1449
U.S. Patent and Trademark Office
INFORMATION DISCLOSURE
STATEMENT

Atty. Docket No. GNVPN.019BUSA

Appln. No. 09/242,977

Applicant: James M. Wilson et al

Filing Date: 2/26/99

Group Art Unit: 1632

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
JDM	AA	5,139,941	8/18/92	Muzycka et al	435	172.3
	AB	5,173,414	12/22/92	Lebkowski et al	435	172.3
	AC	5,478,745	12/26/95	Samulski et al	435	320.1
4	AD	5,753,500	5/19/98	Shenk et al	435	320.1

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation Yes No
DM	AL	WO96/00587	1/11/96	PCT	
	AM	WO95/34670	12/21/95	PCT	
	AN	WO95/33824	12/14/95	PCT	
<u> </u>	AO	WO95/28493	10/26/95	PCT	

Other Documents (including Author, Title, Date, Pertinent Pages, Etc.)

			(metadang radior, Title, Date, Feithlent Pages, Etc.)
1	M	AR	D. Coovert et al, "Gene Therapy for Muscle Diseases", Current Opinion in Neurology, 7:463-470 (1994)
		AS	R. Herzog et al, "Stable Gene Transfer and Expression of Human Blood Coagulation Factor IX After Intramuscular Injection of Recombinant Adeno-Associated Virus", Proc. Natl. Acad. Sci. USA, 94;5804-5809 (May, 1997)
		AT	K. Fisher et al, "Recombinant Adeno-Associated Virus for Muscle Directed Gene Therapy", Nature Medicine, 3(3):306-312 (March, 1997)
		AU	P. Kessler et al, "Gene Delivery to Skeletal Muscle Results in Sustained Expression and Systemic Delivery of a Therapeutic Protein", Proc. Natl. Acad. Sci. USA, 93:14082-14087 (November, 1996)
*		AV	D. Russell et al, "Adeno-Associated Virus Vectors Preferentially Transduce Cells in S Phase", Proc. Natl. Acad. Sci. USA, 91:8915-8919 (September, 1994)
Exam	niner	M	Date Considered /1/9/00

*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 2 of 6

Form PTO-1449
U.S. Patent and Trade Trade INFORMATION DISCLOSURE STATEMENT

Atty. Docket No. GNVPN.019BUSA

Appln. No. 09/242,977

Applicant: James M. Wilson et al

Filing Date: 2/26/99

Group Art Unit:

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	AE	5,252,479	10/12/93	Srivastava	435	235.1
	AF	5,354,678	10/11/94	Lebkowski	435	172.3
	AG	5,436,146	7/25/95	Shenk	435	172.3
	AH	5,474,935	12/12/98	Chatterjee	435	320.1

FOREIGN PATENTO DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translat Yes	ion No
	AP	WO95/23867	9/8/95	PCT		1,0
	AQ	WO95/20671	8/3/95	PCT		
	AAL	WO95/14771	6/1/95	PCT		
	AAM	W095/13392	5/18/95	PCT		

Other Documents (including Author, Title, Date, Pertinent Pages, Etc.)

	T	The Date, Pertinent Pages, Etc.)					
	AW	J. Wolff et al, "Direct Gene Transfer into Mouse Muscle in Vivo", Science, 247:1465-1468 (March 23, 1990)					
	AX	H. Blau et al, "Localization of Muscle Gene Products in Nuclear Domains: Does this Constitute a Problem for Myoblast Therapy?", Adv. Exp. Med. Biol., 280:167-172 (1990)					
	AY	N. Muzyczka, "Use of Adeno-Associated Virus as a General Transduction Vector for Mammalian Cells", Curr. Topics Microbiol. Immunol., 158:97-129 (19920					
	AZ	R. Samulski et al, "Targeted Integration of Adeno-Associated Virus (AAV) into Human Chromosome 19", EMBO J., 10(12):3941-3950 (1991)					
	AAR	R. Kotin, "Prospects for the Use of Adeno-Associated Virus as a Vector for Human Gene Therapy", Human Gene Therapy, 5:793-801 (1994) [Kotin I]					
Examiner		RPS Date Considered 11/19/0)					

^{*}Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 3 of 6

						Sheet 3	of 6		
Form PTO-1449 U.S. Patent and Trademark Office INFORMATION DISCLOSURE			Trademark Office		GNVPN.019BUSA			opln. No. 09/242,977	
ST	ATE	MENT	MAY 0 3 1999	Applicant:	James M. W	ilson et al			
			\ 5/		e: 2/26/99	Group A	Art Unit:	1632	
			TEMPS IRADENIE U.S	S. PATENT D	OCUMENTS				
Exa Init	imine ial	er	Document No.	Date	Name		Class	Subclass	
	<u>D</u> ~	1 AI	5,858,351	1/12/99	Podsakoff		424	93.2	
	_								
			FOREI	GN PATEN	T DOCUMENT	S		L	
Examiner Initial		r	Document No.	Date	Country		Transl Yes	ation No	
1	M	AAN	WO95/07995	3/23/95	PCT				
	L	AAC	WO95/06743	3/9/95	PCT		<u> </u>	1	
		AAP	WO94/20517	9/15/94	PCT				
A		AAQ		12/9/93	PCT				
		O ₁	ther Documents (include	ding Author,	Title, Date, Pert	inent Pag	es, Etc.)		
D	M	AAS	R. Kotin et al, "Site Proc. Natl. Acad. S	-Specific Inte ci. USA, 87:2	gration by Ader 211-2215 (Mar	no-Associ ch, 1990)	ated Vir	us",	
		ААТ	K. Fisher et al, "Tra for Gene Therapy is 70(1):520-532 (Janu	nsduction wit Limited by L	h Recombinant	Adeno-A	ssociate	d Virus	
		AAU	C. Hodgson, "Advar Ther. Patents, 5(5):4	C. Hodgson, "Advances in Vector Systems for Gene Therapy", Exp. Opin. Ther. Patents, 5(5):459-468 (1995)					
		AAV	R. Samulski et al, "F Viruses: Normal Into	R. Samulski et al, "Helper-Free Stocks of Recombinant Adeno-Associated Viruses: Normal Integration Does not Require Viral Gene Expression", J. Virol., 63(9):3822-3828 (September, 1989)					
4		AAW	M. Weitzman et al, 'Associated Virus into	M. Weitzman et al, "Recruitment of Wild-Type and Recombinant Adeno-Associated Virus into Adenovirus Replication Centers", J. Virol., 70(3):1845-1854 (March, 1996)					
Exam		//////	ant.	Date Cor	sidered /n	11910	<u>a</u>		
xamii	ner/Ti	nitial if ci	tation considered whether	on mot citation		///			

*Examiner. Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 4 of 6

Form PTO-1449 U.S. Patent and Frademark Office INFORMATION DISCLOSURE			Atty. Docket No. GNVPN.019BUSA Appln. No. 09/242,977 Applicant: James M. Wilson et al					
STATEM	STATEMENT MAY 0 3 1999							
		TENTE TRADEMINE U.S.	Filing Date	OCUMENTS	Group A	Art Unit:	1632	
Examiner Initial		Document No.	Date	Name		Class	Subclass	
		FOREIG	N PATENT	DOCUMENT	S			
Examiner Initial		Document No.	Date	Country Translation Yes		ation No		
DM	BL	WO91/18088	11/28/91	PCT				
	BM	WO96/18727	6/20/96	РСТ				
	BN	WO96/12010	4/25/96	PCT				
<u>_</u>	во	WO96/17947	6/13/96	PCT				
	Oth	ner Documents (includia	ng Author, T	itle, Date, Pert	inent Pag	es, Etc.)		
DM	AAX	S. Goodman et al, "R Transfer into Hemato (September, 1994)	ecombinant a poietic Prog	Adeno-Associa enitor Cells", B	ted Virus Slood, 840	-Mediate (5):1492-	ed Gene 1500	
	AAY	Synchronized Cells wi	B. Yakobson et al, "Replication of Adeno-Associated Virus in Synchronized Cells without the Addition of a Helper Virus", J. Virol., 61(4):972-981 (April, 1987)					
	AAZ	E. Kremer et al, "Ade Transfer", British Med	novirus and dical Bulletin	Adeno-Associa , 51(1):31-44 (ted Virus (1995)	Mediate	ed Gene	
	BR	E. Raz et al, "Systemic Immunological Effects of Cytokine Genes Injected into Skeletal Muscle", Proc. Natl. Acad. Sci. USA, 90:4523-4527 (May, 1993)						
4	BS	K. Culver et al, "Gene 1994)	Therapy for	Cancer", TIG,	10(5):17	74-178 (N	May,	
Examiner	xaminer (1) Mart Date Considered (1/9/02)							

*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 5 of 6

Form PTO-1449 U.S. Patent and Trademark Office			Atty. Docket No. GNVPN.019BUSA Appln. No. 09/242,977				
INFORM STATEM	INFORMATION DISCLOSURE STATEMENT		Applicant: James M. Wilson et al				
		MAY 0 3 1999	Filing Date		Group A	Art Unit:	1632
		U.S.	PATENT D	OCUMENTS			
Examiner Initial		Document No.	Date	Name		Class	Subclass
	<u></u>						
		FOREIG	N PATENT	DOCUMENT	<u>'S</u>	1	
Examiner Initial		Document No.	Date	Country		Transla Yes	ntion No
DM	BP	WO97/26337	8/24/97	PCT			
	BQ	WO96/40272	12/19/96	PCT			
	BBL	WO97/26336	7/24/97	РСТ			
4	BBM	WO94/13788	6/23/94	PCT			
	Oth	er Documents (including	ng Author, 7	itle, Date, Pert	inent Pag	es, Etc.)	
JDM	BT	C. Hodgson, "Patent Vector Systems for G 468 (1995)	Update, Bio ene Therapy	logicals & Imm'", Exp. Opin.	unologica Ther. Pate	als, Adva ents, 5(5)	nces in :459-
	BU	N. Miller et al, "Targe 199 (February, 1995)	eted Vectors	for Gene There	apy", FA	SEB J., 9	2:190-
	BV	E. Marshall, "Gene Therapy's Growing Pains", Science, 269:1050-1055 (August 25, 1995)					
	BW	M. Kaplitt et al, "Long-Term Gene Expression and Phenotypic Correction Using Adeno-Associated Virus Vectors in the Mammalian Brain", Nature Genetics, 8:148-154 (October, 1994)					
4		K. March et al, "The Adeno-Associated Virus as a Gene Transfer Vector for Human and Non-Human Vascular Smooth Muscle Cells", Clinical Research, 40(2):358A (1992)					
Examiner	(n)	tion considered, whether o	Date Con	(ν)	19/00)	

*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation in not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 6 of 6

					T CCt C	01 0			
Form PTO-1449 U.S. Patent and Trademark Office INFORMATION DISCLOSURE				Atty. Docket No. GNVPN.019BUSA Appln. No. 09/242,977					
	STATEMENT MAY 0 3 1999			Applicant: James M. Wilson et al					
				e: 2/26/99	Group A	Art Unit:	1632		
		U.S.	PATENT I	OCUMENTS					
Examine Initial	er	Document No.	Date	Name		Class	Subclass		
			 	<u> </u>					
		FOREIC	ON PATEN	T DOCUMENT	TS .				
Examine Initial	er	Document No.	Date	Country		Translation Yes No			
JDM	BBN	WO97/12050	4/3/97	PCT	-				
JDM	BBO	27902/92	4/27/93	Australia					
	04		<u> </u>						
	BY	ner Documents (includ							
SDM	В	X. Xiao et al, "Effici Immunocompetent N 70(11):8098-8108 (1	Aice by Ader	10-Associated V	fer into M Virus Vect	fuscle Tistor", J. V	irol.,		
	BZ	X. Xiao et al, "Adenderal Transfer", Advanced	o-Associated Drug Delive	d Virus (AAV) Very Reviews", 12	Vectors for 2:201-215	or Gene 5 (1993)			
	BBR	S. Orkin et al, "Repo NIH Investment in R (December 7, 1995)	rt and Recor	mmendations of	the Panel	to Asso	ss the		
	BBS	A. Lafont et al, "Which Gene for Which Restenosis?", The Lancet, 346:1442-1443 (December 2, 1995)							
	ввт	R. Bartlett et al, "A P Associated Virus (AA Elements for Express 57(Suppl. 4):A235 (C	V) Containi ion of Thera	ing Muscle-Spectory peutic Proteins"	cific Trans	scription			
	BBU M. Einerhand et al, "Regulated High-Level Human β-globin Gene Expression in Erythroid Cells Following Recombinant Adeno-Associated Virus-Mediated Gene Transfer", Gene Therapy, 2(5):336-343 (July, 1995)						iated		
Examiner	10	Mat:	Date Cor	sidered /a	119/00				
Examiner h	hitial if cita	tion considered, whether	or not citation	is in conformance	with MPEF	609; Dra	w line through		

*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 1 of 1 Form PTO-1449 Atty. Docket No. Appln. No. U.S. Patent and Trademark Office GNVPN.019BUSA 09/242,977 INFORMATION DISCLOSURE Applicant: James M. Wilson et al. **STATEMENT** Filing Date: 2/26/99 Group Art Unit: 1632 U.S. PATENT DOCUMENTS Examiner Document No. Date Name Class Subclass Initial DM **AAB** 5,693,531 12/2/97 Chiorini 435 325 FOREIGN PATENT DOCUMENTS Examiner Document No. Date Country Translation Initial Yes No Other Documents (including Author, Title, Date, Pertinent Pages, Etc.)

*Examiner Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner

COVERS SECONDS SEED

Sheet 1 of 1

Form PTO-1449 Atty. Docket No. Appln. No. U.S. Patent and Trademark Office GNVPN.019BUSA 09/242,977 INFORMATION DISCLOSURE Applicant: James M. Wilson et al **STATEMENT** Filing Date: 2/26/99 Group Art Unit: 1632 U.S. PATENT DOCUMENTS Examiner Document No. Date Name Class Subclass Initial DM AJ 5,789,390 8/4/98 V. Descamps 514 44 AK 5,116,739 5/26/92 Y. Teranishi 69.6 435 AAA 5,672,685 9/30/97 W. Matthew 530 359 FOREIGN PATENT DOCUMENTS Examiner Document No. Date Country Translation Initial Yes No IDM **BBP** WO96/14837 5/23/96 **PCT** Other Documents (including Author, Title, Date, Pertinent Pages, Etc.) Examiner Date Considered

^{*}Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.